



Province of the
EASTERN CAPE
EDUCATION

**NATIONAL
SENIOR CERTIFICATE**

GRADE 12

JUNE 2019

**GEOGRAPHY P1
MARKING GUIDELINE**

MARKS: 225

This marking guideline consists of 13 pages.

INSTRUCTIONS AND INFORMATION BEFORE COMMENCEMENT OF MARKING FOR INTERNAL AND EXTERNAL MODERATION PURPOSES.

1. Use a single tick for the allocation of ONE (1) mark. ✓
2. Use TWO ticks for the allocation of TWO (2) marks. ✓ ✓
3. Ticks MUST be placed, on/on top of/at the end of the correct response, in the sentence.
4. A cross (X) MUST be placed at the end of each incorrect/invalid sentence or response.
5. All paragraph questions must include the use of the symbol:



... when a candidate has achieved 8 marks.

(DO NOT allocate marks to candidates where paragraphs are not completed in full sentences.)

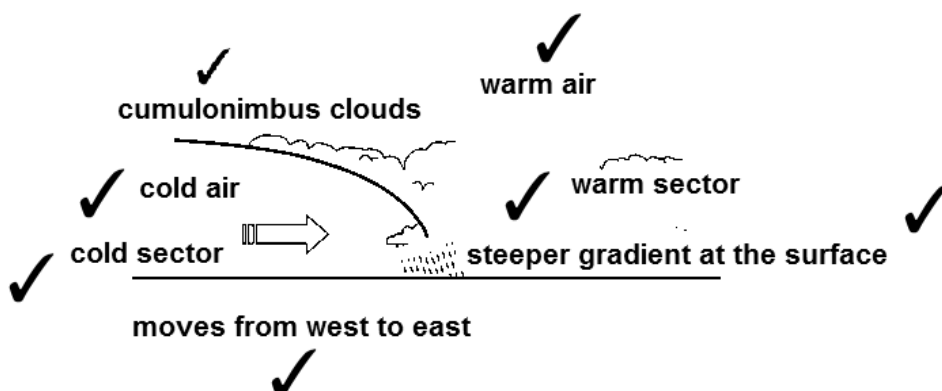
(DO NOT allocate marks where vague responses are given in paragraph responses that do not include an appropriate link to the responses in the Marking Guideline)

6. Each sub-section MUST have a total reflected on the right hand margin e.g. 1.1 should be a total out of (8) and 1.2 should be a total out of (7) and 1.3 should be a total out of (15).
7. The sub total for each sub section must be CORRECTLY added to give you a TOTAL for the question, which must be written on the top left hand margin at the beginning of the answered question.
8. The totals for each completed question MUST be written on the FRONT page with a GRAND TOTAL out of 225.
9. Marking MUST be completed in RED pen.
10. First level Moderation (HOD/Senior Teacher) MUST be completed in GREEN pen.
11. Second level Moderation (Cluster/Circuit) MUST be completed in ORANGE pen.
12. **You are encouraged to engage with the Marking Guideline and ADD appropriate (valid) responses that may have been omitted during the development in consultation with your DISTRICT SUBJECT ADVISOR.** For moderation purposes you are required to write these additions on your marking guideline in RED and include the amended marking guideline as part of the educator portfolio of evidence for external moderation purposes.

SECTION A: CLIMATE, WEATHER AND GEOMORPHOLOGY**QUESTION 1**

- | | | | | |
|-----|-------|---|---------|-----|
| 1.1 | 1.1.1 | B (1) | | |
| | 1.1.2 | E (1) | | |
| | 1.1.3 | D (1) | | |
| | 1.1.4 | A (1) | | |
| | 1.1.5 | G (1) | | |
| | 1.1.6 | I (1) | | |
| | 1.1.7 | H (1) | | |
| | 1.1.8 | C (1) | (8 x 1) | (8) |
| 1.2 | 1.2.1 | B (1) Accept E | | |
| | 1.2.2 | A (1) | | |
| | 1.2.3 | D (1) | | |
| | 1.2.4 | C (1) | | |
| | 1.2.5 | E (1) Accept B | | |
| | 1.2.6 | F (1) | | |
| | 1.2.7 | G (1) | (7 x 1) | (7) |
| 1.3 | 1.3.1 | (a) Winter (1) | (1 x 1) | (1) |
| | | (b) The Kalahari High pressure cell is well developed on the map (1)
Cold fronts influencing the weather of Cape Town (1)
Generally clear skies over the interior due to dominance of the
Kalahari High pressure (1)
(Any TWO) | (2 x 1) | (2) |
| | 1.3.2 | (a) Driven by the westerly wind belt (1) | (1 x 1) | (1) |
| | | (b) Port Elizabeth is situated in the warm sector of the mid-latitude
cyclone and Cape Town in the cold sector (2)
Therefore the temperature of Port Elizabeth is higher than that
of Cape Town (2)
Colder air is heavier and denser than warmer air, therefore the
air pressure of Cape Town is higher than that of Port
Elizabeth (2) | (3 x 2) | (6) |

1.3.3



[ANY FOUR LABELS MUST INCLUDE BOTH AIR MASSES] (4 x 1) (4)

1.4 1.4.1 Line thunderstorm (1) (1 x 1) (1)

1.4.2 **Name:**

A = SW or cool/cold (dry) air mass (1)

B = NE or warm, (moist) air mass (1)

Description:

A = Cold air from Atlantic Ocean (1)

B = warm air from Indian Ocean (1) (2 + 2) (4)

1.4.3 (a) Moisture front (1) (1 x 1) (1)

(b) The **colder and denser** air from the SW subsides (1) as there is undercutting (1) of the warmer, air from the NE (1)

OR

The warmer air is forced upwards by the cool air (1) resulting in currents of warm air masses and increased precipitation rates (1)

[Any TWO] (2 x 1) (2)

1.4.4 **POSITIVE ECONOMIC IMPACT ON AGRICULTURE OF INTERIOR**

Increases availability of rainwater/water to the central regions for agricultural practices of crop and stock farming (2)

Increases profitability and economic activity of drier regions (2)

Storage dams/dams reach capacity levels and water can be used for commercial and subsistence agricultural practices increasing agricultural outputs (2)

Increased nutrients in soil due to improved soil fertility levels will improve agricultural crop yields and farming inputs/outputs (2)

Increased rainfall has a purifying effect: Increased rainfall removes polluted water/diseases in farming areas from rivers/dams improving agricultural environments and stock quality and decreasing costs of maintenance of farms for farmers (2)

[Any FOUR] (4 x 2) (8)

- 1.5 1.5.1 Dendritic (1) (1 x 1) (1)
- 1.5.2 Resembles the branches of a tree (1)
Tributaries join at acute angles (1)
Underlying rock structure is uniform to resistance (1)
[Any TWO] (2 x 1) (2)
- 1.5.3 The main streams of a rectangular pattern bends at 90°/ the main stream of a dendritic pattern winds more gently (2)
Tributaries join the main stream at 90° in a rectangular pattern/tributaries join the main stream at acute angles in a dendritic pattern (2)
The rectangular pattern forms on joints and faults in igneous and sedimentary rocks/the dendritic pattern forms on igneous and sedimentary rocks with an equal resistance to erosion (2)
[Any TWO – Difference must be indicated to get full marks] (2 x 2) (4)
- 1.5.4 (a) Amount of streams in a river system (1)
(Concept) (1 x 1) (1)
- (b) A (1) (1 x 1) (1)
- (c) Area of the drainage basin divided by the total length of all the streams (1)
Determining the stream order (1) (2 x 1) (2)
- (d) The rocks at **A** are generally softer than the rocks at **B**, therefore vertical erosion is easier, creating more channels (2)
The harder rocks of **B**, cause fewer channels and therefore lower density is the result (2) (2 x 2) (4)
- 1.6 1.6.1 WWF/World Wide Fund for nature (1) (1 x 1) (1)
- 1.6.2 Wetlands naturally purify water (2)
Wetlands reduce the risk of flooding (2)
[Any ONE] (1 x 2) (2)
- 1.6.3 'Working for Water'(2)
'Working for Wetlands' (2)
The control of water-thirsty alien plant infestations and wetland restoration (2)
[Any TWO] (2 x 2) (4)

1.6.4 IMPROVING THE QUALITY OF WATER SUPPLY:

Build dams to ensure permanent and controlled water supply to communities (2)

Manage river systems by improving flood controls and improving water volumes (2)

Settlements can be encouraged to remove alien vegetation (2)

Reduce the number of settlements built on the floodplain, to improve infiltration rates in gentle gradients (2)

Increased buffering around the river to limit human impacts (2)

The removal of groundwater/water for irrigation, mines and industries must be researched to ensure limits in pollution and usage (2)

Inter-basin transfers of water – move water from one river basin to another (2)

Artificial levees to keep water in the river and prevent loss of water through flooding (2)

Clearing the river basin of exotic trees/tree species by local environmental groups (2)

Buffer zones to prevent settlements near rivers as it contributes to water pollution (2)

Manage the informal settlements near rivers to prevent domestic and sewage pollution in the water (2)

Strict laws against industries polluting rivers (2)

Heavy fines must be implemented to prevent water pollution (2)

Conserve wet lands as they serve as sponges (2)

GIS can be used to research the influence of mining, industries, settlements etc. on the drainage basin/catchment area (2)

Water treatment works established to purify waste water before entering streams/rivers (2)

More awareness and education campaigns for communities living close to the river (2)

Increasing the access of communities to landfill sites and dump sites for improved waste disposal (2)

Use local community schools to initiate clean up campaigns (2)

[Any FOUR]

(4 x 2)

(8)

[75]

QUESTION 2

- 2.1 2.1.1 Kalahari High (1)
- 2.1.2 Anticlockwise (1)
- 2.1.3 Coastal low (1)
- 2.1.4 North west (1)
- 2.1.5 Mid-latitude cyclone (1)
- 2.1.6 Off shore (1)
- 2.1.7 1 °C/100 m (1) (7 x 1) (7)
- 2.2 2.2.1 D (top view) (1)
- 2.2.2 B (lower course) (1)
- 2.2.3 C (upper; lower; middle) (1)
- 2.2.4 B (consists of deposited silt) (1)
- 2.2.5 D (lower) (1)
- 2.2.6 B (middle) (1)
- 2.2.7 C (multi-concave) (1)
- 2.2.8 B (braided streams) (1) (8 x 1) (8)
- 2.3 2.3.1 Isotherms (1) (1 x 1) (1)
- 2.3.2 $11 - 5 = 6^{\circ}\text{C}$ (1) (1 x 1) (1)
- 2.3.3 Heat Island (1) (1 x 1) (1)
- 2.3.4 The temperature of the city is higher than that of the open country (2)
The temperature is approximately 6°C lower in the open country which surrounds the city (2)
[Any ONE] (1 x 2) (2)
- 2.3.5 The city area has more artificial surfaces that absorb heat (2)
There are more activities in the city that artificially generate heat (2)
Higher buildings in the city trap heat and keep it between them (2)
Drainage systems channel water away, therefore there is less insolation needed for evaporation, hence a surplus of heat is created (2)
(NOTE: ONE EXAMPLE OF EACH OF THE UNDELINE FACTS MAY BE ACCEPTED)
[Any THREE] (3 x 2) (6)
- 2.3.6 The river will have a moderating influence (2)
Some insolation will be used for evaporation, therefore more precipitation and cooling of the city (2)
All places immediately next to the river will have lower temperatures than those further away (2)
[Any TWO] (2 x 2) (4)

- 2.4 2.4.1 When an area experiences a temperature increase with an increase in height (1)
[Concept] (1 x 1) (1)
- 2.4.2 Smog (2) (1 x 2) (2)
- 2.4.3 The graph indicates that at first the temperature decreased with altitude (2)
The temperature increased with the increase in altitude after the inversion layer (2) (2 x 2) (4)
- 2.4.4 **IMPACT ON THE VALLEY**
The smog/pollution is trapped by the inversion layer which causes visibility problems for humans (2)
The pollutants are trapped by the sinking/descending air at night which causes skin irritation / lung problems etc.(2)
The cold air displaced the warm air on the valley floor which can result in frost pockets forming hence affecting farming activities (2)
The inversion layer is warm and settlements are often built in this belt (2)
Crops/plants that are not frost resistant can be planted in this layer (2)
[Any FOUR] (4 x 2) (8)
- 2.5 2.5.1 A powerful river cuts back at its source and captures the headwaters of a neighbouring river (1)
When a river flowing at a lower level captures a river flowing at a higher level (1)
[Any ONE] (1 x 1) (1)
- 2.5.2 A – Lower (1)
B – Higher (1) (2 x 1) (2)
- 2.5.3 Stream A will erode headwardly through the watershed towards stream B because it is lower lying (2)
The steeper gradient over which stream A flows causes it to cut back into the watershed (2)
The valley through which stream A flows is deeper than the valley at stream B causing stream A to cut back into the watershed (2)
[Any TWO] (2 x 2) (4)
- 2.5.4 The subsistence farmers at E would have a greater volume of water (2)
Improved water supply will increase production levels and improve crop yields (2)
Subsistence farming can change to small scale farming production due to increased harvests (2)
[Any TWO] (2 x 2) (4)
- 2.5.5 The aquatic life will decrease (2)
Excess silting will limit habitat of aquatic life (2)
Biodiversity will decrease (2)
[Any TWO] (2 x 2) (4)

2.6	2.6.1	Superimposed drainage patterns (1)	(1 x 1)	(1)
	2.6.2	Paired (1)	(1 x 1)	(1)
	2.6.3	Terraces occur on both sides of the river system (1)	(1 x 1)	(1)
	2.6.4	Because of an increase of the river energy, the river is rejuvenated (2) Vertical erosion occurs (2) A new valley is carved into the old floodplain (2) If this process repeats itself, it will produce topographic steps that will result in the terrace(s) (2) [Any TWO]	(2 x 2)	(4)
	2.6.5	POSITIVE A river terrace is a tourist attraction (2) The tread of the terrace is large enough for the growing of crops (2) The area is too high to get flooded should the water level rise (2) The tread of the terrace consists of sediment that was deposited during flooding in the past (2) The sediment provides fertile soil for agricultural activity (2) NEGATIVE Can result in increased runoff and destruction of vegetation (2) Not suitable for construction (2) Irrigation will be needed as the water will not reach the fields (2) It will be difficult for the farmers to reach the cultivated lands (2) Erosion could undercut the terraces, resulting in the collapse of the terraces (2) Erosion due to rain could occur on the scarp of the terrace (2) [Any TWO]	(4 x 2)	(8) [75]

SECTION B: RURAL AND URBAN SETTLEMENTS**QUESTION 3**

- | | | | | |
|-----|-------|---|---------|-----|
| 3.1 | 3.1.1 | F (settlement) (1) | | |
| | 3.1.2 | A (pattern) (1) | | |
| | 3.1.3 | C (internal structure) (1) | | |
| | 3.1.4 | E (site) (1) | | |
| | 3.1.5 | D (nucleated) (1) | | |
| | 3.1.6 | B (function) (1) | | |
| | 3.1.7 | I (dispersed) (1) | | |
| | 3.1.8 | G (situation) (1) | (8 x 1) | (8) |
| 3.2 | 3.2.1 | C (1) | | |
| | 3.2.2 | D (1) | | |
| | 3.2.3 | C (1) | | |
| | 3.2.4 | A (1) | | |
| | 3.2.5 | C (1) | | |
| | 3.2.6 | A (1) | | |
| | 3.2.7 | A (1) | (7 x 1) | (7) |
| 3.3 | 3.3.1 | rural (1) | (1 x 1) | (1) |
| | 3.3.2 | nucleated (1) | (1 x 1) | (1) |
| | 3.3.3 | Hamlet (1)
[Accept rural hamlet] | (1 x 1) | (1) |
| | 3.3.4 | Arable land (2) The soil is fertile and promotes the growth of crops (2)
Pasturage (2) The location enables the growth of a pasturage for livestock in the centre of the hamlet (2)
Fuel (2) The location of woodlands and trees around the settlement increases the availability of wood for heating (2)
Dry point (2) Settlement can be located on a slope above the flood level (2)
Aspect (2) The buildings are located on the middle slopes to improve the amount of heat received (2)
[Any ONE with explanation] | (2 x 2) | (4) |

- 3.3.5 Collective land ownership – A belief system of agricultural activities within a single patriarchy and siblings (One family with buildings in close proximity to each other) (2)
 Shared farming practices – Farmers with similar religious and belief systems group together to share farming implements and methods (2)
 Traditional cattle farming communities believed to keep the holdings for livestock at the centre with buildings surrounding the cattle farming as the main activity (2)
[Any TWO] (2 x 2) (4)
- 3.3.6 Reduction of cultivated land would increase the rate of rural depopulation (2)
 Soil becomes infertile and uneconomical to continue agricultural practices leading to abandoned farms and villages (2) (2 x 2) (4)
- 3.4 3.4.1 Rural-urban migration (1 x 1) (1)
- 3.4.2 Better services in urban areas (water, power, accept other examples) (1)
 Better facilities in urban areas (schools, clinics, accept other examples) (1)
 'Bright lights' (1) (cinemas, clubs, accept other examples)
[Any ONE] (1 x 1) (1)
- 3.4.3 (a) Decrease in people living in rural areas (1)
(Concept) (1 x 1) (1)
- (b) Businesses will have a significant drop in clientele (2)
 Small scale businesses will close down (2)
 No upgrading of infrastructure by local authorities because of poor local finances (2)
 Elderly and young with low buying power left behind (2)
[Any TWO] (2 x 2) (4)
- 3.4.4 Possibility of finding secure employment (2)
 Family will have regular and consistent income (2)
 Better services like housing, medical, education, etc. (2)
 Possibility of better recreational and cultural activities (2)
 Being able to afford basic needs and beyond will alleviate poverty (2)
 Better education will have a positive effect on the children's future possibilities (2)
[Any FOUR] (4 x 2) (8)

- 3.5 3.5.1 Vegetables/cucumbers/lettuce/carrots/tomatoes (1)
 Traditional cloth/clothing/garments (1)
 Food/Pies/Samoosas (1)
 Traditional drinks (1)
 Pillows (1)
 Cushions (1)
 Shoes (1)
 Fruits/Pears/Apples (1)
[Any TWO] (2 x 1) (2)
- 3.5.2 Low order goods (1) (1 x 1) (1)
- 3.5.3 Goods are obtained at lower prices/easily obtained (2) (1 x 2) (2)
- 3.5.4 The items are daily items and services which will be lower priced and are available and purchased by both regular and irregular patrons in the CBD (2)
 Each business will sell cheaper goods to operate with a lower profit margin with improved volumes as the threshold population is not constant (2)
 The type of customers (threshold population) would seek informal traders as their pricing on goods and services will be lower (2)
[Any ONE] (1 x 2) (2)
- 3.5.5 A low threshold population is required for the goods and services provided (2) (1 x 2) (2)
- 3.5.6 The price of goods does not depend on distance (2)
 The potential for customers increases because the CBD is a centrally placed location (2)
 The central location ensures that the business is visited regularly by customers with a variation in distances (2)
 The radius from the centre extends in all directions increasing the sphere of influence (2)
[Any THREE] (3 x 2) (6)
- 3.6 3.6.1 Lack of housing (1) (1 x 1) (1)
- 3.6.2 Most of the land held in residential urban settlements is owned by the wealthy (2) (1 x 2) (2)
- 3.6.3 **Challenge 1**
 Most families cannot afford to buy property in residential urban settlements (2)
Challenge 2
 Most families are forced to rent property at higher prices in residential urban settlements (2) (2 x 2) (4)

- 3.6.4 Closer monitoring of ownership patterns in residential urban settlements by estate agents and the wealthy (2)
 Maximum number of property ownership (restrictions of ownership) within communities (2)
 Different costing structures for wealthy and powerful owners (2)
 Appropriate land use planning policies that integrate affordability on the outskirts of the CBD to solve some lack of housing challenges (2)
 Rental controls to limit profitability margins and improve availability of housing (2)
 Property gains taxes to the wealthy (2)
 Restricted areas for council approved housing to reduce the impact of a lack of living space (2)

[Any FOUR]

(4 x 2) (8)

[75]

TOTAL: 225

